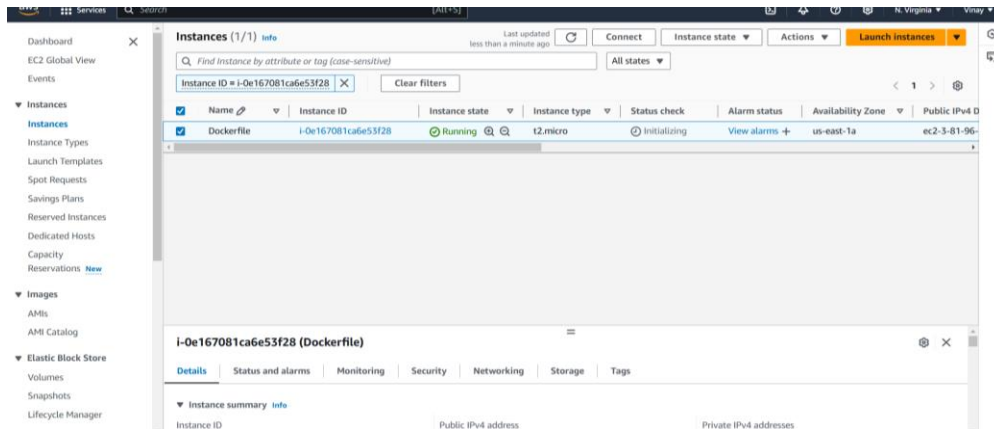


Docker Volumes creation

1. Launch an AWS EC2 Instance

1. Log in to the [AWS Management Console](#).
2. Navigate to the **EC2 Dashboard** and launch an instance.
3. Choose an appropriate Amazon Machine Image (e.g., Amazon Linux, Ubuntu).
4. Select an instance type (e.g., t2.micro for small workloads).
5. Configure instance details and storage as needed.
6. Launch the instance and connect to it via SSH.



2. Install Docker on the EC2 Instance

1. Switch to Sudo user
2. Update the package manager and install Docker and Start Docker

```
*** System restart required ***
last login: Mon Nov 18 15:27:48 2024 from 18.206.107.27
ubuntu@ip-172-31-47-111:~$ sudo su
root@ip-172-31-47-111:/home/ubuntu# cd
root@ip-172-31-47-111:~# systemctl status docker
Warning: The unit file, source configuration file or drop-ins of docker.service changed on disk. Run 'systemctl daemon-reload' to reload units.
* docker.service - Docker Application Container Engine
   Loaded: loaded (/usr/lib/systemd/system/docker.service; enabled; preset: enabled)
   Active: active (running) since Mon 2024-11-18 14:40:43 UTC; 16h ago
   TriggeredBy: • docker.socket
   Docs: https://docs.docker.com
   Main PID: 2178 (dockerd)
   Tasks: 10
   Memory: 50.6M (peak: 295.9M)
   CPU: 12.284s
   CGroup: /system.slice/docker.service
           └─2178 /usr/bin/dockerd -H fd:// --containerd=/run/containerd/containerd.sock

Nov 18 14:40:43 ip-172-31-47-111 dockerd[2178]: time="2024-11-18T14:40:43.941139875Z" level=info msg="API listen on /run/docker.sock"
Nov 18 14:40:43 ip-172-31-47-111 systemd[1]: Started docker.service - Docker Application Container Engine.
Nov 18 15:34:19 ip-172-31-47-111 dockerd[2178]: time="2024-11-18T15:34:19.297630269Z" level=info msg="Layer sha256:70cf55227ae0a557f8f6dbabddc1ef4ad19aa8b98a536"
Nov 18 16:23:01 ip-172-31-47-111 dockerd[2178]: time="2024-11-18T16:23:01.137032767Z" level=info msg="Ignoring event" container=97b4acc9989bf3c1b53764ff0b83d5912
Nov 18 16:23:01 ip-172-31-47-111 dockerd[2178]: time="2024-11-18T16:23:01.151814513Z" level=warning msg="failed to close stdin: task 97b4acc9989bf3c1b53764ff0b83d5912"
Nov 18 16:25:30 ip-172-31-47-111 dockerd[2178]: time="2024-11-18T16:25:30.554504986Z" level=error msg="Error setting up exec command in container container2: Com"
Nov 18 16:36:42 ip-172-31-47-111 dockerd[2178]: time="2024-11-18T16:36:42.494158862Z" level=error msg="Not continuing with pull after error: errors:Unauthorized: re"
Nov 18 16:36:42 ip-172-31-47-111 dockerd[2178]: time="2024-11-18T16:36:42.494183861Z" level=info msg="Ignoring extra error returned from registry" error="unautho"
Nov 18 16:37:40 ip-172-31-47-111 dockerd[2178]: time="2024-11-18T16:37:40.212819138Z" level=info msg="Ignoring event" container=e196125db3ecdca8ee5b4ac9db73e59e4
Nov 18 16:37:40 ip-172-31-47-111 dockerd[2178]: time="2024-11-18T16:37:40.228638248Z" level=warning msg="failed to close stdin: task e196125db3ecdca8ee5b4ac9db73e59e4"
```

3. Create and Manage Docker Volumes

Docker volumes are used to persist data generated by and used by Docker containers.

1. Create a Volume
2. List Volumes
3. Inspect a volume
4. Use a Volume in a Container

```
aws Services Search [Alt+S]
Unable to find image 'httpd:latest' locally
latest: Pulling from library/httpd
2d429b9e73a6: Already exists
d675ed392a91: Pull complete
4f4fb700ef54: Pull complete
3ed0d9182dde: Pull complete
0062038102c9: Pull complete
334a67c7f78b: Pull complete
Digest: sha256:6bdbbf5a616ac3d6ef543a693fd5dfafae2428b4b0cdc52a480166603a069136
Status: Downloaded newer image for httpd:latest
4f43faf88fe20e2bf0b95d7dc0d4dcc84c2768b4255aa3cd081689c0ea7445fc
root@ip-172-31-47-111:~# docker exec -it container4 /bin/bash
root@4f43faf88fe2:/usr/local/apache2# cd
root@4f43faf88fe2:~# ls
root@4f43faf88fe2:~# ls
root@4f43faf88fe2:~# ll
bash: ll: command not found
root@4f43faf88fe2:~# cd /
root@4f43faf88fe2:~# ls
bin boot dev etc home lib lib64 media mnt opt proc root run sbin srv sys tmp usr var volume3
root@4f43faf88fe2:~# exit
exit
root@ip-172-31-47-111:~# docker ps
CONTAINER ID   IMAGE     COMMAND                  CREATED        STATUS        PORTS        NAMES
4f43faf88fe2   httpd     "httpd-foreground"      3 minutes ago Up 3 minutes  80/tcp       container4
e196125db8ec   nginx     "/docker-entrypoint..." 17 minutes ago Up 16 minutes  80/tcp       container3
97b4acc9989b   ubuntu   "/bin/bash"             32 minutes ago Up 26 minutes  container2
88e7fd2ce4e2   imagevolume "/bin/bash"             About an hour ago Up About an hour  container1
```

```
aws Services Search [Alt+S]
root@ip-172-31-47-111:~# docker volume ls
DRIVER      VOLUME NAME
local       87dba4cdaf9624c769d25b47e4fdff6a2c43f97881ea9b0249a776b4050d32a0
local       493ee2d8012abb2a590035172cf9a446b801119a8caba211cfac867c75e85ea7
local       volume3
```